

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-54.(Canceled)

55.(Currently Amended) A method for producing a schedule of a plurality of time dependent tasks comprising:

receiving and storing a plurality of tasks to be scheduled;

receiving and storing a maximum amount of time allowed to schedule the plurality of tasks:

generating only a portion of a number of schedule permutations required to produce an optimal schedule of the plurality of tasks using an enumerative brute force method;

estimating an amount of time required to generate the number of schedule permutations required to produce the optimal schedule from the amount of time used to generate the portion of the number of schedule permutations;

determining whether the estimated amount of time is greater than the maximum amount of time allowed to generate the schedule;

producing the optimal schedule using the enumerative brute force method if the estimated amount of time required is not greater than the maximum amount of time allowed to schedule the plurality of tasks;

generating only a portion of a number of schedule permutations required to produce a schedule of tasks using a deterministic programming method if the optimal schedule is not yet produced;

estimating an amount of time required to generate the schedule of the plurality of tasks to be scheduled using the deterministic programming method based on the amount of time required to schedule the portion of the plurality of tasks using the deterministic programming method if the optimal schedule is not yet produced;

estimating an amount of memory space required to schedule the plurality of tasks using the deterministic programming method based on the amount of memory space required to schedule the portion of the plurality of tasks using the deterministic programming method if the optimal schedule is not yet produced;

determining whether the estimated amount of time required to generate the schedule is greater than the maximum amount of time allowed to schedule the plurality of tasks if the optimal schedule is not yet produced;

determining whether the estimated amount of memory space required to generate the schedule is greater than a maximum amount of memory space if the optimal schedule is not yet produced;

generating the schedule of the plurality of tasks to be scheduled using the deterministic programming module if the estimated amount of time required to generate the schedule is not greater than the maximum amount of time allowed to generate the schedule and the estimated amount of memory space is not greater than the maximum amount of memory space and the optimal schedule is not yet produced; and

generating the schedule using a genetic method if the estimated amount of time required to generate the schedule is greater than the maximum amount of time allowed or the estimated amount of memory space is greater than the maximum amount of memory space and the optimal schedule is not yet produced.